# Draft Environmental Impact Statement

# Vail Valley Forest Health Project

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| Project Location: | Vail Valley Forest Health Project Area<br>Holy Cross Ranger District, White River National Forest<br>Eagle County, Colorado |
| Lead Agency: | USDA-Forest Service<br>Holy Cross Ranger District, White River National Forest<br>24747 U.S. Highway 24 (P.O. Box 190)<br>Minturn, CO 81645 |
| Responsible Official: | Don G. Carroll, Acting Forest Supervisor<br>White River National Forest |
| Recommending Official: | Cal G. Wettstein, District Ranger<br>Holy Cross Ranger District |
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**Abstract:** This Draft Environmental Impact Statement (DEIS) has been prepared in response to an urgent need for landscape-level management of forest health, especially the reduction of hazardous fuels near communities, and adaptive management as the current mountain pine beetle epidemic moves across the landscape and conditions change rapidly. The project area is located in the Vail Valley and Eagle River Valley areas along the Interstate 70 corridor between Vail Pass and Avon, and contains 72,000 acres of National Forest administered lands, privately owned lands, and state-owned lands. Forest Service decisions related to the proposed Vail Valley Forest Health Project are limited to National Forest administered lands. The Proposed Action consists of lodgepole pine treatments, aspen treatments, and fuels treatments. Actions proposed include managing a limited number of lodgepole pine stands by thinning, sanitation, salvage, and patch cutting to treat existing areas of high beetle damage, manage future mountain pine beetle risk, and help reduce fuel loads; enhancing aspen communities by patch cutting, removing conifers, and clearing along the margins of stands to improve their function as fuelbreaks and conserve the area's recreation setting; and reducing fuel loads near communities by prescribed broadcast burning, mechanical treatments, and pile burning. The DEIS describes why action is needed in the project area; proposes actions to meet the need; considers public issues; identifies alternatives to address public concerns; and discloses the potential direct, indirect, and cumulative effects of implementing each of four alternatives considered: Alternative A – No Action, Alternative B – Proposed Action, Alternative C (reduce smoke effects and potential conflicts with recreation use), and Alternative D (reduce tree cutting in inventoried roadless areas). The Forest Service has identified Alternative B with modifications as the preferred alternative.

**IMPORTANT NOTICE:** The DEIS will be made available for a 45-day comment period, with public notification in the Federal Register and the Glenwood Post. Comments will be addressed in an appendix to the Final Environmental Impact Statement (FEIS). In addition, the FEIS may be revised with additional analysis, mitigation measures or a revised or new alternative. The Deciding Officer will then choose a selected action (or no action), and the FEIS and Record of Decision (ROD) will be made available for public review. The ROD accompanying the FEIS will be subject to appeal pursuant to 36 CFR 215.7.

# SUMMARY

There is a critical need to address forest health in the Vail Valley and Eagle River Valley, especially the current mountain pine beetle epidemic and the accumulation of hazardous fuels near communities. This area provides a world-class recreational setting that includes the Vail and Beaver Creek ski resorts and its intrinsic beauty is a valued resource. The local economy is highly dependent on recreation and tourism.

Adherence to Forest Plan guidance for the White River National Forest limits the scope and intensity of management activities that are possible in this scenic and highly valued recreation setting. However, the potential human and economic impacts of a large stand replacing fire that is difficult to control or extinguish make some action to protect and conserve this setting and its resources imperative. Any management activity on National Forest System lands within the valley could impact the quality of views from recreation use areas, residences, and travel routes.

The project area for the Vail Valley Forest Health Project is located in Eagle County, Colorado, along the Interstate 70 corridor between Vail Pass and Avon and contains approximately 72,000 acres of National Forest administered lands, privately owned lands, and state-owned lands. The project area includes the wildland urban interface zones for the following communities: Vail, Intermountain, Eagle-Vail, Minturn, Avon, Mountain Star, Wildridge, Beaver Creek, and Arrowhead.

The forested portion of the project area is a lodgepole pine dominated ecosystem with a mountain pine beetle population that is currently at epidemic levels. In western forests where lodgepole pine is the dominant conifer species, small beetle populations are always present. Although epidemic beetle populations can be a natural component of lodgepole pine dominated ecosystems, such high levels can kill 50 to 70 percent or more of the mature lodgepole pine over vast areas, leaving few lodgepole pine more than 8 inches in diameter.

The high density of older, large-diameter lodgepole pine across the landscape provides ideal conditions for rapid spread of mountain pine beetle. The project area has been experiencing visible beetle activity since 1995. Initially, affected areas occurred most typically in a pattern of scattered, patchy mortality. Mountain pine beetle activity in the project area has increased significantly during the last year. More than 50 percent of the lodgepole pine have been killed in some stands.

The removal of a portion of the dead, dying, and high-risk lodgepole pine would manage future mountain pine beetle risk and help reduce fuel loads. The overall strategy for reducing potential losses from future beetle outbreaks in landscapes with a large mature lodgepole pine component aims at creating a landscape mosaic where age class, size, stand density, and species distribution do not favor the development of large-scale outbreaks.

Aspen communities contribute significantly to the intrinsic beauty of the project area. Conifers replace aspen naturally over time through succession unless a disturbance such as wildland fire restores the vigor of aspen. The decline of aspen in Colorado is estimated to be 49 percent since European settlement. The restoration of aspen is supported by Forest Plan guidance and increased public awareness and concern regarding aspen lands.

Much of the shrublands in the Vail Valley are outside or trending outside their historic range of variability. This has resulted in homogenous, over-mature shrublands that pose a risk of higher intensity fires due to the buildup of hazardous fuels. Creating a mosaic of age and structural classes in the shrublands would reduce the intensity and severity of wildland fires and their detrimental effects to the local mountain communities, such as higher risk to firefighters, loss of homes, and landslides.

High mortality in lodgepole pine would change scenic quality, recreational opportunities, and wildlife habitat in the Vail Valley. As the trees begin to die and fall, the ability to maintain acceptable fuel loads within the wildland urban interface would be compromised. Historic fire and forest conditions, mountain pine beetle activity, hazardous fuels, and aspen conditions all drive the purpose and need for landscape-level management within the project area.

The purpose and need for the Vail Valley Forest Health Project is threefold: 1) implement Forest Plan guidance for forest health and vegetation management across the important recreational setting of the Vail Valley; 2) modify vegetation structure in lodgepole pine to reduce mountain pine beetle risk and future outbreaks; and 3) reduce the accumulation of hazardous fuels through prescribed fire and mechanical treatments that could decrease the fire hazard and increase the probability of safely defending life and property from wildland fire.

The Vail Valley Forest Health Project responds directly to the goals identified in the 10-Year Comprehensive Strategy for the National Fire Plan. It focuses on hazardous fuels reduction in wildland urban interface areas (Goal 2), and restoration of healthy, diverse, and resilient ecological systems (Goal 3). In accordance with the implementation plan, hazardous fuels would be treated to reduce the risk of wildland fire to communities and the environment and vegetative conditions would be modified to increase firefighter and public safety.

The Draft Environmental Impact Statement (DEIS) for the Vail Valley Forest Health Project was prepared under the direction of a Forest Service interdisciplinary team by Greystone Environmental Consultants. The process complies with the National Environmental Policy Act and Forest Service policy for environmental analysis.

The DEIS contains discussions about why action is needed in the project area; proposes actions to meet the need; considers public issues; identifies alternatives to address public concerns; and disclosed the environmental consequences of No Action, the Proposed Action, and two action alternatives. The project would be implemented over a five-year period. The alternatives are compared in Chapter 2 of the DEIS.

## ALTERNATIVE A - NO ACTION

Current conditions would change over time under the No Action alternative as natural processes continue to alter the forest, however, no vegetation management activities would be used to change the current conditions. Ongoing activities such as recreation, fire suppression, and road maintenance would continue. Regulations require that a No Action alternative be analyzed as a baseline against which the effects of the action alternatives can be measured or compared.

Over time, the beetle-killed lodgepole pine would accumulate as surface fuels and canopy gaps created by beetle mortality would allow understory trees to become established, creating multistory ladder fuels that are more prone to crown fires. Potential fuel loads would not be reduced by management activities such as prescribed burning or mechanical treatment. Aspen stands would not be enhanced as natural fuelbreaks and vegetation within designated wilderness adjacent to the Vail Valley would continue to trend outside the historic range of variability. Management activities analyzed under other environmental documents may still occur.

## ALTERNATIVE B – PROPOSED ACTION

Vegetation management actions, including green tree removal, sanitation/salvage, felling in place, piling and burning, pruning, chipping, and prescribed burning, would be undertaken to improve forest health and reduce the accumulation of hazardous fuels near communities in the Vail Valley. A variety of techniques would be used to improve stand structure and species diversity, and consequently, forest health in the Vail Valley while meeting Forest Plan guidance. The techniques used would provide for the adaptive management of this area, as the mountain pine beetle epidemic moves across the landscape and conditions change rapidly.

The removal of lodgepole pine by thinning, sanitation, salvage, and patch cuts would treat existing areas of high beetle damage, manage future mountain pine beetle risk, and help reduce fuel loads. Aspen communities would be enhanced by patch cuts, removal of conifers, and clearings along the margins of stands to restore the vigor of these communities, improve their function as natural fuelbreaks, and conserve the scenic recreation setting of the Vail Valley. Prescribed broadcast burning, mechanical treatments, and pile burning would reduce potential fuel loads near communities.

The Proposed Action consists of lodgepole pine treatment units, aspen treatment units, and fuels treatment units. In all, 3,000 acres of National Forest administered lands would be treated. However, this acreage estimate may vary by as much as 15 percent, as projects are implemented. It is estimated that 3,000 to 3,450 acres of treatments could be included in the Proposed Action. Forest Service decisions related to the proposed Vail Valley Forest Health Project are limited to National Forest administered lands.

- South of the I-70 corridor, treatments in lodgepole pine and aspen would affect about 1,400 acres. An estimated 700 acres of lodgepole pine near Minturn would be thinned, patch cut, sanitized, or salvaged. About 700 acres of aspen in several areas would be enhanced by patch cuts, perimeter treatments, and prescribed burning.

- North of the I-70 corridor, the following treatments would occur. About 1,600 acres of shrublands, grasslands, and aspen would be managed to move them toward their historic range of variability. Mechanical vegetation treatments and prescribed fire would be used to create a mosaic of age and structural classes that would reduce the intensity and severity of wildland fires in the wildland urban interface.

## ALTERNATIVE C

Alternative C would emphasize the reduction of health and safety risks from smoke and the reduction of conflicts with recreation use on Stone Creek, Pitkin Creek, and Bighorn Creek trails while improving forest health and reducing hazardous fuels. In all, 2,500 acres of National Forest administered lands would be treated.

A cable logging system would be used to remove lodgepole pine from above in Units 101 and 102, so that the Stone Creek Trail (FDT 2349) would not be used to haul timber. No prescribed broadcast burning would occur under this alternative. Mechanical treatments and pile burning would be used in treatment units outside designated wilderness to reduce hazardous fuels. No fuels treatments would occur within the Eagles Nest Wilderness. Other components of Alternative C would be the same as Alternative B.

## ALTERNATIVE D

Alternative D would emphasize the reduction of visual effects on roadless area characteristics that are associated with the cutting of trees while improving forest health and reducing hazardous fuels. In all, 2,200 acres of National Forest administered lands would be treated.

Under Alternative D, no cutting of trees in inventoried roadless areas would occur beyond a 200-foot buffer along the boundary between National Forest administered lands and private lands. Enhancement of aspen stands that provide natural fuelbreaks near the town of Vail would not be very extensive. Other components of Alternative D would be the same as Alternative B.

## ISSUES

The DEIS addresses the effects of the project, considering several public issues and concerns.

Roadless Areas
Windthrow Risk
Fuels Management and Wildland Fire Hazard
Effectiveness of Silvicultural Treatment
Recreation/Trails
Wilderness
Scenery Management
Air Quality
Slope Stability
Wildlife
Heritage Resources
Noxious Weeds
Roads
Traffic

## DECISIONS TO BE MADE

This DEIS is not a decision document. Its main purpose is to disclose the potential consequences of implementing a proposed action and alternatives to that action. However, the DEIS is prepared on the premise that certain decisions must be made and that they will be documented in a Record of Decision (ROD) that will be based on the Final Environmental Impact Statement (FEIS) for the Vail Valley Forest Health Project, when it is prepared. The ROD will document the selection of an alternative, which could be no action, the proposed action, another action alternative, or a combination of alternatives. Comments on the DEIS are used to prepare the FEIS and ROD. Accordingly, this DEIS focuses on providing analysis sufficient to support the following decisions that will be made by the Forest Service in the ROD:

1. The location and number of acres that will be treated using the following vegetation management activities: thinning, sanitation, salvage, patch clearcutting, stand perimeter thinning and patch cutting; mechanical fuel reduction, broadcast burning, and pile burning.

2. The existing and temporary roads on NFS lands that will be used during project activities, at what level of maintenance the roads will be maintained during and after project activities, and how temporary roads will be closed following project activities.

3. The public and project-related use of the existing Stone Creek Trail (FDT 2349) during project activities, including its potential widening and use for log hauling, which would require closure of the trail for one logging season (spring through fall) and restoration of the trail following its use for log hauling.

The DEIS documents the evaluation of only the actions and activities being considered within the project area. This DEIS will not be used to revisit previous decisions made in the ROD for the Revised Forest Plan. It will, to the extent appropriate for each resource or discipline, consider the combined (cumulative) effects of the proposed Vail Valley Forest Health Project and other projects in close proximity to it.

The Deciding Official for this project is the Forest Supervisor for the White River National Forest in Glenwood Springs, Colorado. The Recommending Official for this project is the District Ranger for the Holy Cross Ranger District in Minturn, Colorado.

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